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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SPOONER, LAMONT M	
ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/067,788	SUGENO ET AL.	
	Examiner	Art Unit	
	Lamont M. Spooner	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/23/06 have been fully considered but they are not persuasive.

2. In response to applicant's arguments regarding claim 1, page 17, that "Rather, communication is carried out through an interface that is owned by each of communication objects. That is, the natural language itself is used as a language common to the various communication objects." The Examiner is unable to locate this in the claims.

3. In response to applicant's arguments, p.17, regarding claim 21, "Applicant's claimed invention comprises a network computing system using a language text (language communication protocol) as communication medium, which is fundamentally different from the invention of Cheyer et al." As claimed, language text is broadly defined, and not deemed any specific communication protocol, as claimed, the communication method of Cheyer is deemed applicable.

4. In response to applicant's arguments regarding claim 28, p.17. and 18, "A semiotic base, a lexico-grammar base, and a semantic base and also referring to an electric dictionary to carry out parsing...As discussed

above the system disclosed by Cheyer et al. cannot carry out the method recited in claim 28." However, Cheyer et al. teaches (C.14..ines 14-22), having a natural language parser, inherently utilizing a dictionary, further said electronic dictionary defined in (C.7.lines 35-37-his parser, C.5.lines 5-17, C.21.lines 5-29-his noun, meaning and syntax), this dictionary holds his data solvable, which corresponds to the lexico-grammar, semantic features and roles.

5. In response to applicant's arguments regarding claim 30, "situation base and a meaning base to identify a global plan template..." Cheyer teaches wherein said semiotic base of said language computer has a situation base for systematically holding a plurality of situation types indicative of a situation, in which a language is used, and a plurality of situation features corresponding thereto, wherein said semiotic base of said language computer further includes a situation base for systematically holding a plurality of situation types indicative of a situation (**Fig. 6, items 432, 454, 1204, and fax, C.14.lines 19-56-his fax, Bill Smith, and Fax job, as the field, tenor and mode, respectively**), in which a language is used, and a plurality of situation features corresponding thereto (ibid), both of said lexico-grammar base and said meaning base holding a plurality of

registers of a language (ibid, his addresses), which are associated with the situation types held in said situation base, said meaning processing mechanism of said language computer refers to said meaning base, said lexico-grammar base and said situation base, to identify a situation type corresponding to a register of a lexico-grammatical feature of a character string which is included in a language text serving as an object to be processed, to identify a register of a semantic feature corresponding to the identified situation type, and to identify a semantic feature corresponding to the identified semantic role within the identified register of semantic feature, so that said meaning processing mechanism understands a meaning of the language text on the basis of the identified semantic feature (ibid, C.23.line 39-C.24.line 14-necessarily requiring the situation base, lexico-grammatical information, features and meaning as explained above and his address registering the related information), a meaning base for systematically holding a plurality of semantic features of a language and a plurality of semantic roles corresponding thereto (see claim 1), and a corpus for holding a plurality of language texts serving as examples of exchange of a language (see claim 4), together with the situation features and semantic features of a language (see claim 1), said situation base further holding a

plurality of generic structures of text corresponding to said situation types (C.14.lines 23-30, C.12.line 65, C.12.lines 35-45), and said meaning base further holding a plurality of registers of a language, which are associated with the situation types held in said situation base (see claim 4), and a plurality of global plan templates which are associated with the generic structures of text held in said situation base (Fig. 7 item 720), said meaning processing mechanism of said language computer refers to said situation base and said meaning base, to identify a global plan template, which is relevant to a generic structure of text corresponding to a situation type during generation of a language text, and to prepare a local plan on the basis of the identified global plan template and of a predefined semantic feature, so that said meaning processing mechanism generates a language text on the basis of the prepared local plan and the examples of the language texts held in said corpus (C.21.line 31-C.22.line 13-his goals/plan as templates executable locally, and his peer agents as global goal/plan templates, c.14.lines 23-30, see claim 4 for examples, his results, response are based on the above).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheyer et al. (US 6,859,921).

As per **claim 1**, Cheyer teaches an everyday language-based computing system comprising a language computer for processing a language text described or dictated by an everyday language (C.8.lines 9-21-his natural understanding agent),

said language computer having a semiotic base (Fig. 6 item 426-, C.8.lines 10-17-his natural language understanding agent, C.11.lines 37-39, C.7.lines 35-37,), in which a system of meanings of the everyday language is structured, and a meaning processing mechanism for understanding a meaning of a language text and generating a language

text on the basis of said semiotic base (ibid, Fig. 6 item 1202, C.23.lines 50-59, C.23.line 45-C.24.line 28-as examples of generated text).

As per **claim 2**, Cheyer teaches claim 1 and further teaches wherein said semiotic base of said language computer has an electronic dictionary for holding a plurality of dictionary items including lexico-grammatical information and semantic information (C.7.lines 35-37-his parser, C.5.lines 5-17, C.21.lines 5-29-his noun, meaning and syntax), a lexico-grammar base for systematically holding a plurality of lexico-grammatical features of a language and a plurality of semantic roles corresponding thereto (ibid), and a meaning base for systematically holding a plurality of semantic features of a language and a plurality of semantic roles corresponding thereto (ibid, C.13.lines 35-52, C.14.lines 23-30, C.15.lines 42, 43, C.21.lines 5-29-his concepts as including semantic features), said lexico-grammatical features held in said lexico-grammar base and said semantic features held in said meaning base being associated with said lexico-grammatical information and semantic information of each of said dictionary items held in said electronic dictionary (ibid), respectively,

said meaning processing mechanism of said language computer refers to said electronic dictionary, said lexico-grammar base and said

meaning base, to identify a semantic role corresponding to a lexico-grammatical feature of a character string which is included in a language text serving as an object to be processed, and to identify a semantic feature corresponding to the identified semantic role, so that said meaning processing mechanism understands a meaning of the language text on the basis of the identified semantic feature (ibid-Examiner note: the referral is necessary in determining the meaning from the parsed information, which necessarily requires lexical and grammatical information, by definition of a parser, C.8.lines 15-17, C.18.lines 41-43 –his goal, wherein in C.13.lines 35-51, C.14.lines 23-30-include semantic roles).

As per **claim 3**, Cheyer further teaches claim 2 and wherein said semiotic base of said language computer further includes a situation base for systematically holding a plurality of situation types indicative of a situation (Fig. 6, items 432, 454, 1204, and fax, C.14.lines 19-56-his fax, Bill Smith, and Fax job, as the field, tenor and mode, respectively), in which a language is used, and a plurality of situation features corresponding thereto (ibid), both of said lexico-grammar base and said meaning base holding a plurality of registers of a language (ibid, his addresses), which are associated with the situation types held in said situation base, said

meaning processing mechanism of said language computer refers to said meaning base, said lexico-grammar base and said situation base, to identify a situation type corresponding to a register of a lexico-grammatical feature of a character string which is included in a language text serving as an object to be processed, to identify a register of a semantic feature corresponding to the identified situation type, and to identify a semantic feature corresponding to the identified semantic role within the identified register of semantic feature, so that said meaning processing mechanism understands a meaning of the language text on the basis of the identified semantic feature (ibid, C.23.line 39-C.24.line 14-necessarily requiring the situation base, lexico-grammatical information, features and meaning as explained above and his address registering the related information).

As per **claim 4**, Cheyer teaches claim 1, and further teaches wherein said semiotic base of said language computer further includes a corpus for holding a plurality of language texts serving as examples of exchange of a language, together with a plurality of semantic features of a language (C.26.lines 53-55-his resolution strategies as the corpus...language), and said meaning processing mechanism of said language computer refers to said corpus, to retrieve an example of a language text, which is analogous

to a language text serving as an object to be processed, so that said processing mechanism understands a meaning of the language text on the basis of a semantic feature of the retrieved example of the language text (ibid).

As per **claim 5**, Cheyer teaches claim 1, and further teaches wherein said semiotic base of said language computer has a situation base for systematically holding a plurality of situation types indicative of a situation, in which a language is used, and a plurality of situation features corresponding thereto (see claim 3), a meaning base for systematically holding a plurality of semantic features of a language and a plurality of semantic roles corresponding thereto (see claim 1), and a corpus for holding a plurality of language texts serving as examples of exchange of a language (see claim 4), together with the situation features and semantic features of a language (see claim 1), said situation base further holding a plurality of generic structures of text corresponding to said situation types (C.14.lines 23-30, C.12.line 65, C.12.lines 35-45), and said meaning base further holding a plurality of registers of a language, which are associated with the situation types held in said situation base (see claim 4), and a plurality of global plan templates which are associated with the generic

structures of text held in said situation base (Fig. 7 item 720), said meaning processing mechanism of said language computer refers to said situation base and said meaning base, to identify a global plan template, which is relevant to a generic structure of text corresponding to a situation type during generation of a language text, and to prepare a local plan on the basis of the identified global plan template and of a predefined semantic feature, so that said meaning processing mechanism generates a language text on the basis of the prepared local plan and the examples of the language texts held in said corpus (C.21.line 31-C.22.line 13-his goals/plan as templates executable locally, and his peer agents as global goal/plan templates, c.14.lines 23-30, see claim 4 for examples, his results, response are based on the above).

As per **claim 6**, Cheyer teaches claim 5, and further teaches wherein said semiotic base of said language computer further includes a lexico-grammar base for systematically holding a plurality of lexico-grammatical features of a language and a plurality of semantic roles corresponding thereto (see claim 5), said lexico-grammar base holding a plurality of registers of a language, which are associated with said situation types held in said situation base, and said corpus holding a plurality of language texts

serving as examples of exchange of a language, together with the situation features, semantic features and lexico-grammatical features of a language (see claim 5), said meaning processing mechanism of said language computer refers to said meaning base to identify a semantic role corresponding to a semantic feature included in said local plan (C.21.line 31-C.22.line 13-his local plan necessarily having semantic information and role, to determine the subject of an action, triggered locally), and refers to said lexico-grammar base, to identify a register of a lexico-grammatical feature corresponding to a situation type during generation of a language text, and to identify a lexico-grammatical feature corresponding to the identified semantic role within the register of the identified lexico-grammatical feature (see claim 2), so that said meaning processing mechanism of said language computer generates a language text on the basis of the identified lexico-grammatical feature, said local plan and the examples of the language texts held in said corpus (ibid, see claim 1-generated text, claim 3-his register, claim 4-his example).

As per **claim 7**, Cheyer teaches claim 6, and further teaches wherein said semiotic base of said language computer further includes an electronic dictionary for holding a plurality of dictionary items including lexico-

grammatical information and semantic information (see claims 1, 2), said lexico-grammatical features held in said lexico-grammar base and said semantic features held in said meaning base being associated with said lexico-grammatical information and said semantic information of each of said dictionary items held in said electronic dictionary, respectively (see claims 1, 2), said meaning processing mechanism of said language computer refers to said electronic dictionary to output a dictionary item including the semantic feature included in said local plan and the identified lexico-grammatical feature, and refers to said lexico-grammar base to combine the identified lexico-grammatical feature with the outputted dictionary item, so that said meaning processing mechanism of said language computer generates a language text (see claims 1-6, C.12.line 65, C.21.lines 29, 30-his parameter including local plan template, C.21.line 15-17, C.23.line 45-C.24.line 28-generated text).

As per **claim 8**, Cheyer teaches claim 1, and further teaches a language operating system for managing said language computer by an everyday language (Fig. 4).

As per **claim 9**, Cheyer teaches 9 and wherein said language operating system has a secretary agent for interactively exchanging a

language text between a user and said language computer (Fig. 4, including item 402).

As per **claim 10**, Cheyer teaches claim 9, and wherein said secretary agent is prepared as a plurality of candidates of secretary agents every specialized domain, and a desired candidate of secretary agent is selected by an instruction from the user (Fig. 4 items 400-418, Fig. 5 multiple agents for user selection).

As per **claim 11**, Cheyer teaches set forth in claim 9, wherein said language operating system further includes a knowledge base which is managed by said secretary agent (Fig. 4-facilitator and item 418).

As per **claim 12**, Cheyer teaches claim 11, and wherein said knowledge base is associated with said semiotic base of said language computer (C.11.lines 35-39).

As per **claim 13**, Cheyer teaches claim 9, wherein said language operating system has a user interface for personifying said secretary agent to present the personified secretary agent together with a virtual space which is prepared by simulating a user's accommodation space (Fig. 5, Fig. 13).

As per **claim 14**, Cheyer teaches claim 13, and wherein said user

interface is set in a desired form by an instruction from the user (ibid-user configurable/adjustable interfaces).

As per **claim 15**, Cheyer teaches claim 8, and wherein said language operating system manages a process relating to a processing of a language text on said language computer (Fig. 5-language text as his "When mail ...").

As per **claim 16**, Cheyer teaches claim 8, and wherein said language operating system manages a language file including a language text (ibid).

As per **claim 17**, Cheyer teaches claim 8, wherein said language operating system exchanges language data from and to another everyday language-based computing system (C.26.lines 4-7).

As per **claim 18**, Cheyer teaches claim 17, wherein said language data include language text data and data indicative of the meaning thereof (C.26.lines 4-19, C.21.lines 15-19).

As per **claim 19**, Cheyer teaches claim 1, and wherein said language computer is a virtual machine which is realized on the existing platform (Figs 5, 13).

As per **claim 20**, Cheyer teaches claim 8, and wherein said language computer further includes a language resource for providing various

services by an instruction from said language operating system (Figs. 5, 8, C.8.lines 9-21), said language resource having a resource body operated on the existing platform, and a language interface for connecting the resource body to a command based on a language of said language operating system (ibid, Fig. 4 items 402, 418-as interface for connecting ...).

As per **claim 21**, Cheyer teaches an everyday language-based computing system comprising: a client computing system; and a network computing system connected to said client computing system (Fig. 4-as the client and network computing system, for example, facilitator agent as client, and item 410, 404, 406, 412, as network computing systems, C.1.lines 29-33, Fig. 6, also C.26.lines 5-15-networking computing system as Bob's system, also Fig. 5-the ICL further interpreted as a network system), said client computing system including a client language computer for processing a language text described or dictated by an everyday language (Fig. 4 items 402, 418), and a client-oriented language operating system for managing said client language computer by the everyday language (ibid, Fig. 5 "when mail arrives..."), said network computing system including a network language computer for processing a language

text which is exchanged from and to said client computing system (ibid, Fig. 4, as the communication between facilitator, ICL, and other agents, C.12.lines 9-21), and a network-oriented language operating system for exchanging language data from and to said client computing system and for managing said network language computer by the everyday language (ibid, C.6.line7-C.7.line 17), and said client-oriented language operating system and said network-oriented language operating system exchanging language data therebetween in accordance with a language communication protocol (Fig. 4 item 418-containing the protocol, also, C.26.lines 4-15-Sara-Bob-communication utilizing communication protocol).

As per **claim 22**, Cheyer teaches claim 21, and further teaches wherein said language data exchanged in accordance with said language communication protocol include language text data as well as data indicative of the meaning, lexico-grammatical feature and situation feature thereof (see claims 1-4, and 21-his ICL, and lexical, grammatical and semantic information, situation, features as explained above, as it relates to communication between systems).

As per **claim 23**, Cheyer teaches claim 21, and wherein said client language computer includes a client semiotic base which is provided by

structuring a system of meanings of the everyday language (see claims 1, and 2), and a client meaning processing mechanism for understanding a meaning of a language text and generating a language text on the basis of said client semiotic base (see claims 2), and said network language computer includes a network semiotic base provided by structuring a system of meanings of the everyday language (see claim 21), and a network meaning processing mechanism for understanding a meaning of a language text and generating a language text on the basis of said network semiotic base (see claim 21), said client semiotic base and said network semiotic base being associated with each other under control of said client-oriented language operating system and said network-oriented language operating system (see claim 21, C.26.lines 4-15-interpreted as the client agent of Sara, communicating with network agent of Bob, over the ICL protocol, utilizing the entire system as explained in claims 1-20, including the semiotic base, and semantic base in each of the client and network system).

As per **claim 24**, Cheyer teaches claim 21, and wherein said client-oriented language operating system has a secretary agent for interactively exchanging a language text between a user and said client language

computer (Fig. 5, Fig. 6), and said network-oriented language operating system has a network manager agent for exchanging a language text from and to said secretary agent and for managing said network language computer (ibid, as a first client, and the second as the network system as it relates to C.26.lines 4-14, Sara and Bob's system, interpreted as client/network, as Bob's system services multiple systems, over ICL).

As per **claim 25**, Cheyer teaches claim 24, wherein said client-oriented language operating system further includes a client knowledge base which is managed by said secretary agent (Fig. 5-facilitator), and said network-oriented language operating system further includes a network knowledge base which is managed by said network manager agent (Fig. 5 facilitator, and ICL-as explained in claim 21), said client knowledge base and said network knowledge base being associated with each other under control of said secretary agent and said network manager agent (ibid, each system having a knowledge base, and communicating over ICL between agents).

As per **claim 26**, Cheyer teaches claim 21, wherein said network-oriented language operating system manages a process relating to a processing of a language text which is exchanged from and to said client

computing system (C.26.lines 4-15-Bob's system as the networking system, receiving exchange from Sara).

As per **claim 27**, Cheyer teaches claim 21, and wherein said network-oriented language operating system manages a language file including a language text which is exchanged from and to said client computing system (C.26.lines 4-14-"Bob, I'm trying to choose ...").

As per **claims 28-32**, claims 28-32 are entirely within the scope of claims 1-20, and are thus rejected for the same reasons and under the same rationale.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571/272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms
8/8/06

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER